The Twenty-Ninth Annual Honor Awards Program United States Department of Commerce 1977

October 26, 1977/3:00 P.M.

Department of Commerce Auditorium

Fourteenth Street between E Street and Constitution Avenue, N.W. Washington, D.C.

MUSIC	U.S. Merchant Marine Academy Regimental Band
INTRODUCTION	John M. Golden Director of Personnel
PRESENTATION OF COLORS	U.S. Merchant Marine Academy Color Guard
NATIONAL ANTHEM	Band
ADDRESS	Juanita M. Kreps Secretary of Commerce
ANNOUNCEMENT OF AWARDS	Elsa A. Porter Assistant Secretary for Administration
PRESENTATION OF SILVER MEDALS	Secretary of Commerce Assisted by Departmental Officials
MUSICAL SELECTION	Band
PRESENTATION OF GOLD MEDALS	Secretary of Commerce Assisted by Departmental Officials
CLOSING REMARKS	Assistant Secretary for Administration





David S. Nathan

Director, Office of Budget and Program Evaluation Office of the Assistant Secretary for Administration

George M. Heller

Principal Researcher Statistical Research Division Bureau of the Census





Mr. Nathan has consistently made outstanding contributions to effective and efficient financial management by analyzing programs, developing options, and offering sound recommendations to the Secretary. He has improved the systems to allocate resources and has assured their efficient utilization. Through his efforts, the Departmental budget process has had the highest credibility with the Office of Management and Budget and with the Congress. He has become a respected member of the Departmental management team and serves as advisor to senior policy officials and program managers alike.

Mr. Heller is recognized for the outstanding leadership, vision, and wisdom he has brought to bear in the application of computer technology to gathering, processing, and analyzing social and economic statistical data. He has served with distinction as an advisor to the Bureau's executive staff on the effective use of computers in statistical data processing and computing. He has, in addition, been widely consulted on the use of computers in statistical methodology thus contributing to the improvement of statistical computing throughout the Government. He has contributed to the work of a large number of professional societies and associations. He has been skillful in the recruiting, guidance, and development of professional staff, particularly in providing opportunities for women and minorities. His exceptional accomplishments have contributed significantly to the high technical and scientific reputation of the Bureau of the Census.

Harold Nisselson

Assistant Director for Statistical Standards and Methodology Bureau of the Census

Naomi D. Rothwell

Principal Researcher Statistical Research Division Bureau of the Census





For more than 25 years, Mr. Nisselson has provided outstanding leadership in the development of innovative methods for the collection, processing, and analysis of census and survey data. He has been primarily responsible for the studies which have led to the mailout/mailback/personal followup type of censuses conducted since 1960 and has been a pioneer in the development of the post-enumerative surveys designed to evaluate the quality of the census. He has demonstrated commitment to the establishment and maintenance of statistical standards within the Bureau of the Census, and his influence in insisting on the publication of the limitations of data is being felt throughout the Federal statistical agencies and the statistical community at large. He is an outstanding representative of the Bureau and the Department on a number of interagency committees dealing with both methodology and standards because of his unusual ability and dedication to the highest principles of professional integrity.

Ms. Rothwell has had a key leadership role in improving the coverage and quality of censuses and sample surveys. She has made unique and major research contributions to measuring the existence of differentials (particularly black vs. white, urban vs. rural) in census coverage and in developing an understanding of the causes of undercoverage. She has taken the lead in developing techniques for reducing coverage differentials by applying the insights gained into the causes of undercoverage and by adapting to the Census Bureau use, improved interviewing techniques and methods of questionnaire design. She has been notably effective in recruiting and training promising young professionals (with particular emphasis on providing equal employment opportunities for minorities and women) for work in the field of coverage and response error control and measurement, in inspiring and directing their work, and in securing the maximum utilization of the pertinent research results in the Census Bureau's operating program.

Secretary, Maritime Subsidy Board Maritime Administration Chief, Division of Domestic Costs
Office of Shipbuilding Costs
Maritime Administration





Mr. Dawson has made major contributions to the programs of the Maritime Administration, mandated by law to strengthen the American Merchant Marine. As Secretary, Maritime Subsidy Board, he has been extremely effective in directing and administering the complex work of the Board and in carrying through on its decision actions. He has demonstrated a comprehensive knowledge and understanding of the maritime industry and of the laws and regulations relating to maritime affairs as well as the Agency's policies and programs. His advice and counsel have been of exceptional value to the Board and Assistant Secretary in their deliberations. He has exercised a high degree of tact, diplomacy, and good judgment in dealing with outside interests on matters often of a highly complicated and controversial nature. As alternate member of the Board, he has contributed greatly to the effective functioning of the Board during a period of major program innovations involving many policy issues and problems. In addition, Mr. Dawson has established an outstanding record in administering the Agency's activities in the highly sensitive areas of freedom of information and personal privacy.

Mr. McGowan, by virtue of his extensive ship cost experience and dedication, has contributed substantially to the success of the Maritime Administration's ship construction programs. His outstanding leadership and management in this most important and, at times, controversial field is recognized nationally. He has given the Agency the reputation for even-handed fairness in the cost administration of its programs, while at the same time satisfying the scrutiny of all official inquiries. His recent activities as Contracts Termination Officer in the settlement of claims of nearly \$24 million resulting from cancellation of a large tanker construction contract have been particularly effective. He has made major contributions to the development of new procedures for use in negotiating contracts between shipowner and shipbuilder. Through his personal dedication and innovative approaches to all job assignments, Mr. McGowan has come to be recognized as the country's leading expert in ship cost and price estimating, and the Agency has enjoyed a continuity of successful operation.

Margarete Ehrlich

Physicist Institute for Basic Standards National Bureau of Standards

Alan C. Gallagher

Physicist Institute for Basic Standards National Bureau of Standards Boulder, Colorado





Dr. Ehrlich is recognized for her vigorous and successful initiatives which she has undertaken in furthering the role of the National Bureau of Standards in improvement of practical radiation measurement in the United States. As chairperson of a working group of the Health Physics Society, she has brought together representatives of industry, government, the health physics profession, and radiation users to reach agreement on methods of testing the accuracy of the dosimeters supplied by all the organizations which provide radiation protection measurement services in the United States. She has played an active role in writing related international standards. She was instrumental in establishing the monoenergetic neutron beams now used at the National Bureau of Standards for calibration of personnel protection instruments. She has surveyed the dosimetry of cobalt-60 and electron beams used in cancer therapy and is preparing to extend this to highenergy accelerators. These activities have further strengthened the national and international role for the National Bureau of Standards in the improvement of practical radiation measurements for personnel protection and for cancer therapy.

Dr. Gallagher is cited for his invention and development of a new measurement and predictive methodology for determining the useful properties of an important class of molecules called excimers. His breakthrough comes after work by many scientists over a period of 50 years to quantitatively predict and measure the radiative properties of gases at high pressures, and his techniques have already been adopted world-wide. His methods have been used by industry to optimize high pressure arc lamps of the type used for industrial purposes and highway lights, leading to product improvement of significant commercial value. Properties determined from his technique are also being used in the design of lasers of the class needed for satellite and rocket defense and for laser fusion production of energy. Dr. Gallagher's contributions include: 1) invention of the first practical predictive capability for the intensity of molecular continuum radiation in high pressure light sources; 2) invention of unique spectroscopic techniques for accurate measurement of molecular continuum radiation under controlled conditiions; and 3) careful determination of data essential to identifying and designing systems of greatest promise for technological advances.

Melvin Linzer

Management Analyst Officer
Office of the Associate Director for
Administration
National Bureau of Standards

Research Chemist Institute for Materials Research National Bureau of Standards





Mr. Hall is recognized for his outstanding contributions to the field of management in the areas of organization theory and practice, management analysis, and Management Information Systems, Mr. Hall is one of the leading figures in the area of organization and management practice within the Department of Commerce. He has, at the request of the Department, performed major assignments that resulted in the realignment of Commerce Automatic Data Processing management responsibilities and contributed to the thinking on the organizational alignment of Federal Energy Programs. Mr. Hall's research on the question of productivity measurement in the Research and Development environment has received wide acclaim and has contributed significantly to the field of program measurement. On the international level, his contributions to Commercesponsored programs have reflected favorably on the Department as an organization skilled in the techniques and practices of management.

Dr. Linzer is recognized for his outstanding scientific and technical leadership in the development of improved instrumentation and measurement techniques for evaluation of materials reliability and for medical diagnosis. Under his scientific leadership, a major new program has been designed and carried to fruition in the development of sophisticated ultrasonic instrumentation and techniques which has greatly expanded the sensitivity of ultrasonics for detection of minute flaws in materials. These improved methods are applicable to evaluation of safety and reliability involving a broad range of systems including energy generation (nuclear reactor components), energy transmission (pipelines), and chemical processing (pressure vessels). The significant feature of Dr. Linzer's advances in ultrasonic instrumentation is the potential to detect and locate abnormalities in human tissue and the absence of radiation hazards associated with x-ray methods for examining patients. Thus, the methods developed by Dr. Linzer offer the prospect for safe, mass-screening of patients for breast cancer and other tissue abnormalities.

Donald D. Wagman

Director, Center for Fire Research Institute for Applied Technology National Bureau of Standards Research Chemist Institute for Materials Research National Bureau of Standards





Dr. Lyons is recognized for his unique and outstanding leadership in organizing the Bureau's fire research activities into a cohesive, dynamic program with a clearly identifiable mission to help reduce U.S. fire losses. Under his direction the fire programs were reoriented into a stable technical unit which assumed a leadership role in fire technology. Because of Dr. Lyons' efforts, the fire program has become an interdisciplinary effort with unique technical talents and specialized research facilities. Under his management, the Center's funds and staff increased from \$2 million and 76 members in FY 1973 to \$7 million and 125 members in FY 1977. Dr. Lyons' stature as both a research scientist and manager is widely recognized, nationally and internationally. He was recently commended by the Federal Trade Commission for the establishment of the Products Research Committee for Plastic Products, a \$5 million five year research program for developing technical information to improve the fire safety of plastic products and systems. Due largely to Dr. Lyons' efforts, the U.S. and Japan have entered an international agreement to work cooperatively on the technical problems posed by unwanted fires. As a result of this cooperative program both countries are benefiting from the exchange of technical information and personnel and from joint research projects on toxicity and fire behavior of materials.

Mr. Wagman has shown outstanding technical leadership in the development of standard reference data on the energetics of chemical reaction and has promoted effective international cooperation in the preparation of reliable tables of data. For more than twenty-five years he has, with skill and dedication, led the National Bureau of Standards program to provide industry and technology with encyclopedic tables of reliable chemical thermodynamic data. His personal contributions to these tables have established him as one of the world's leading authorities on the evaluation of scientific data. He has refined the art of data evaluation, introducing new computerized techniques. During the past decade, showing imagination and enthusiasm, he has persuaded scientists throughout the world to cooperate in the preparation of tables of standardized data for use in international ventures. In doing this, he has laid the foundation and set the pattern for future international cooperative standard reference data programs. His activities have been an important factor in the ready acceptance of the Bureau as a leader in thermochemistry and as a provider of high quality data.

Donald R. Johnson

Physicist

Frank J. Lovas

Chemist Institute for Basic Standards National Bureau of Standards



Daniel L. Albritton

Physicist Environmental Research Laboratories National Oceanic and Atmospheric Administration Boulder, Colorado



Through their pioneering work in the study of the microwave spectra of short-lived chemical species. Drs. Johnson and Lovas have attracted world-wide attention. Their careful and innovative work has enabled them to make major contributions to chemistry, to radio-astronomy, and to air pollution measurement and control. Their studies of short-lived reaction intermediates have identified, and described in detail, species that chemists had hitherto postulated but never really observed. They have also shown how microwave measurements can be applied to plant monitoring and process control in industry. As a logical consequence of their excellent laboratory measurements, Drs. Johnson and Lovas have directly participated in the discovery of a number of new interstellar molecules. They have been indirectly involved in many more discoveries which have resulted from a series of monographs that they established on the spectra of interstellar molecules. Their work shows that the Bureau is at the forefront of spectroscopic measurement technology and its application to science and industry.

Dr. Albritton is recognized for his outstanding pioneering contributions to two areas of science. One is the development of new and improved theoretical techniques for the analysis of diatomic molecule rotational and vibrational intensity distributions. This work has led to solution of long standing spectroscopic problems and has allowed the first successful analysis of a quartet molecular band system. It has made an important and enduring impact on molecular spectroscopy and has been widely used in aeronomic and laboratory spectroscopic studies. The other major scientific contribution of Dr. Albritton is the development of a unique experimental capability for measuring ion-molecule reaction rate constants over the ionospheric temperature range, the only such technique presently available. This research involved the first determination of the velocity distribution of ions in a drift tube, a major achievement in molecular physics. The most important ionospheric reaction rates have been determined in these experiments. These laboratory measurements play a key role in the present understanding of ionospheric chemistry and the analysis of many space experiments.

John B. Hovermale

Chief, Atmospheric Modeling Branch National Weather Service National Oceanic and Atmospheric Administration



Supervisory Research Electronic Engineer National Marine Fisheries Service National Oceanic and Atmospheric Administration Seattle, Washington





Dr. Hovermale, an eminent research meterologist, has through his vision, ingenuity, and outstanding scientific leadership contributed significantly to the safety and welfare of the Nation. He has spearheaded the efforts of a research group at the National Meteorolgical Center which conceived, developed, and implemented an operational mathematical and physical model of hurricanes. Because of Dr. Hovermale's hurricane model, it is possible for protective actions to be taken earlier. Lives can be saved and property losses minimized. There are other significant economic, commercial, and environmental benefits from Dr. Hovermale's contribution.

Mr. McNeely is recognized for his major contributions to the field of fishing gear technology, sampling system development, and conservation engineering. These contributions, which have won national and international recognition for himself, his co-workers, and the Federal Service, have included among others (1) a harvest system which utilizes large nets of novel design and a unique depth telemetry system to position the nets in the water column to intercept and capture midwater schooling fishes; (2) a giant fyke net to catch salmon fingerlings in turbulent waters below hydroelectric dams on the Columbia River; (3) shrimp separator trawls that allow immature food fishes and juvenile shrimp to be returned to the sea floor unharmed during the fishing process: (4) fish traps which permit the selective harvest of sablefish; and most recently (5) the conservation of porpoises through the conception and introduction of new technology into the U.S. tropical tuna fishery as mandated by the Marine Mammals Protection Act.

Byron B. Phillips

Chief, Instrumentation Task Force Environmental Research Laboratories National Oceanic and Atmospheric Administration Boulder, Colorado

Jack H. Puerner

Chief, Special Projects Group National Environmental Satellite Service National Oceanic and Atmospheric Administration





Mr. Phillips has made outstanding contributions to the advancement of the techology needed to conduct research studies of atmospheric and oceanographic phenomena. Through his efforts three large long-range aircraft have been equipped with modern and sophisticated research systems for studying and understanding hurricanes, weather modification processes, meteorological and oceanographic phenomena, and severe convective storms thereby making the Research Facilities Center of the Environmental Research Laboratories the most modern and advanced research aircraft capability in the world. This was accomplished under very stringent staffing and budgetary constraints. His expert understanding of the research needs of environmental scientists was crucial to the successful completion of this effort.

Since 1963 Mr. Puerner has been a world leader in giving satellites the ability operationally and routinely to collect and relay environmental data from remote land, sea, and airborne observing platforms. From his early initiatives came the SCOMO (Satellite Collection of Operational Meteorological Observations) concept which led to the Data Collection System now carried by The National Oceanic and Atmospheric Administration's geostationary satellites. The performance of this System directly reflects his impact as Data Collection System Project Manager. The ground equipment developed under his direction embodies significant engineering advances with respect to signal processing. This System not only collects data measurements but also gives early warning of conditions leading to natural disasters. As a technical pioneer and spokesman for data collection by satellite, Mr. Puerner has substantially influenced the course and usefulness of space-related programs in the U.S. and in other nations as well.

Robert L. Edwards

Director

Richard C. Hennemuth

Deputy Director Northeast Fisheries Center National Marine Fisheries Service National Oceanic and Atmospheric Adminstration Woods Hole, Massachusetts



Dr. Edwards and Mr. Hennemuth are considered an extremely successful management/scientific team. However, of equal importance are their individual expertise and accomplishments. They have been responsible for promoting a comprehensive ecosystem study incorporating ecology and fishery assessment. Through their leadership, efforts have been initiated in programs of joint, cooperative research off New England. These programs, in cooperation with foreign countries, are the finest example of joint and useful studies in the world and have increased study and knowledge of Northwest Atlantic fisheries far above that which otherwise would have been possible. They have increased cooperative work and mutual understanding. ameliorated scientific disagreements, and allowed more fruitful approaches to international management accord. They have made major contributions to fishery science, and the application of these contributions to management serves as the basis for this special recognition.





Elmer S. Biles

Senior Economic Advisor Office of the Associate Director for Economic Fields Bureau of the Census

A meaningful comparability among the import, export, and production classification systems has been needed to assist in assessing the Nation's competitive position and for policy formulation. Mr. Biles demonstrated outstanding leadership by development and implementation of a concordance among three independent commodity classification systems. Through his ingenuity and capable management, he resolved the many conceptional problems, developed meaningful levels of comparability, and devised the framework for collection of comparable data on imports, exports, and production. He has maintained the highest standards of professional excellence and contributed significantly to the Federal Government's statistical program.

Howard N. Hamilton

Supervisory Computer Systems Analyst Industry Division Bureau of the Census

Mr. Hamilton is recognized for his outstanding leadership and distinguished contributions to the improvement of the timeliness and accuracy of industrial data through the development of specialized interactive computer programs for analysts. These highly innovative programs eliminated a major drawback of the present system by editing corrections and providing revised estimates via random access processing. A table editor program also enables the analyst to directly correct the tables utilizing computer terminals. In a related area, the interactive printing system which he designed enables the Jeffersonville, Indiana staff to control the printing of large volumes of material stored in the Washinigton computer system, resulting in substantial savings in both time and money.

Roger A. Herriot

Chief, Family and Individual Income Statistics Branch Population Division Bureau of the Census

Mr. Herriot has displayed outstanding skill as a statistician/economic demographer in applying a variety of techniques in the development of money income estimates and projections. His imaginative and creative abilities in the development of income data have permitted the Census Bureau to meet the ever increasing demands called for such statistics by a variety of legislations. He has contributed significantly to two key major Bureau programs: 1) the Revenue Sharing/ Administrative Record program in the development of money income statistics and 2) the Survey of Income and Education in the development and reanalysis of measures of poverty. The success of these programs is, in large measure, attributed to Mr. Herriot's skill and competence and ability in devising techniques for the derivation of small-area income statistics.

Robert N. Scheller

Assistant Division Chief Administrative Services Division Bureau of the Census

As the Bureau's leading authority in the field of non-military nuclear war preparedness, Mr. Scheller has consistently demonstrated exceptionally high professional competence, superior leadership, and technical and managerial abilities. The preparedness procedures, plans, and damage assessment systems initiated and implemented by Mr. Scheller for the Department of Commerce have significantly improved the Department's preparedness posture and greatly enhanced the Department's contribution to the Federal preparedness program for postattack survival, reconstitution, and recovery. Mr. Scheller's high quality of performance reflects great credit upon himself, the Bureau, and the Department of Commerce.

Robert Schoenfeld

International Trade Specialist
Office of Market Planning
Bureau of International Commerce
Domestic and International Business
Administration

Mr. Schoenfeld is recognized for his pioneering work in developing and refining the Department's export targeting system. Through this system, the Department is better able to direct its export promotion resources to the most promising industries and foreign markets. His imaginative approach and his drive and initiative in providing guidance to this program have proven highly valuable. In addition to the development of the targeting system, he has provided an outstanding service through the inception and development of a series of Target Industries Planning Reports which give detailed technological and market information on major U.S. industries and major foreign markets.

William R. Vitous

Exhibit Manager
Office of International Marketing
Bureau of International Commerce
Domestic and International Business
Administration

Mr. Vitous has consistently displayed the highest degree of versatility, combined with excellence in performing vital assignments. As an Exhibits Manager for major exhibitions abroad, he has repeatedly demonstrated his resourcefulness and excellent judgment as well as his superior management and executive abilities. In 1977, he accomplished two special missions under particularly adverse condtions, reflecting great credit on the Department and significantly advancing Departmental programs with a substantial savings of funds.

Reginald A. Bourdon

Director, Office of International Activities Maritime Administration

Mr. Bourdon has demonstrated outstanding skill and ability in planning, coordinating, and accomplishing the international activities of the Maritime Administration. His efforts have influenced international maritime policy on a broad range of issues impacting upon the mission of the Maritime Administration and the Department of Commerce, significantly benefiting the U.S. Merchant Marine. In particular, his efforts in the resolution of discriminatory action against U.S.-flag carriers by the government of Brazil and Argentina demonstrated exceptional ability, expertise, and professionalism in carrying out the mission of the Maritime Administration in the complex and sensitive area of international activities. Mr. Bourdon has also demonstrated exceptional skill and knowledge in the implementation of the U.S.-.U.S.S.R. Maritime Agreement.

John W. Pullen

Region Port and Intermodal Development Officer Western Region Maritime Administration San Francisco, California

Captain Pullen is recognized for extremely competent performance of duties in the Western Region Office of Port and Intermodal Development. He was appointed to head up the newly expanded region Port and Intermodal Development Program in the Western Region in 1972. He has shown initiative and creativity in attempting to overcome many of the industry's problems. He has been a strong advocate of regional port planning and cooperation and has been instrumental in getting many of the local groups together to solve their common problems and face the issues holding back expansion and development. He has improved the image of government to industry by trying to combat "red tape" and untangle regulations.

Metallurgist Institute for Materials Research National Bureau of Standards

Dr. Carter is recognized for meritorious authorship as the principal author of "Metallic Shifts in Nuclear Magnetic Resonance", published by Pergamon Press. This is truly a monumental work of over 2,300 pages, filling four volumes of the prestigious Progress in Material Science series. In addition to being the largest and most complete review ever written on Nuclear Magnetic Resonance Knight shifts, with 5,000 references, the work includes the phase diagrams and crystal structure data of every binary alloy system for which Knight shift data have been reported, as well as other Nuclear Magnetic Resonance properties and related properties such as superconducting transition temperatures, magnetic susceptibilities, electronic specific heats, compressibilities, and more.

Charles G. Culver

Disaster Research Coordinator Institute for Applied Technology National Bureau of Standards

Dr. Culver is recognized for his significant contributions to reducing the loss of life and property caused by such natural disasters as earthquakes, fires, tornadoes, and hurricanes. With National Science Foundation sponsorship, he initiated a \$1 million national program for mitigating the effects of earthquakes on buildings by developing improved seismic design criteria. As a result of his work, the cities of Los Angeles and San Francisco incorporated improved seismic design concepts in their building codes. For the Defense Civil Preparedness Agency, he developed methods for evaluating how well existing buildings withstand earthquakes and extreme winds. This work is being used by Federal agencies to comply with the Disaster Relief Act of 1974. Over the past two years, he also provided expert technical assistance to Italy, Iran, and Romania in the reconstruction planned in the wake of major earthquakes.

Physicist Institute for Basic Standards National Bureau of Standards

Mr. Domen is recognized for the originality. skill, and dedication shown in establishing national absorbed-dose standards at the National Bureau of Standards. These calorimetric standards are an important contribution to dosimetry for the treatment of cancer by gamma rays and electrons. Mr. Domen discovered a new principle for operation of calorimeters and constructed two instruments on that principle. He has successfully carried one of them to the Stanford Linear Accelerator in California, to the French National Standards Laboratory, and to the International Bureau of Weights and Measures in Paris to make difficult and precedent-setting measurements. As a result, Mr. Domen is internationally recognized as a leading expert on calorimetry for radiation dosimetry, and the National Bureau of Standards has been brought into the forefront of this new and important field.

Richard S. Franzen

Supervisory Writer-Editor Office of the Associate Director for Information Programs National Bureau of Standards

In three and one half years at the National Bureau of Standards, Mr. Franzen has made extraordinary progress in developing a broad, productive information program having strong relationships with the technical and public media and excellent communications links with both the technical and general public. His individual leadership and overall competence have been primarily responsible for the success of this activity. Mr. Franzen's innovative developments have not only benefited the Bureau through needed dissemination of the results of its research programs but have had a significant impact on the Nation by providing useful information in areas such as energy conservation, home security, computer privacy, and the metric system.

Peter L. M. Heydemann

Chief, Pressure and Vacuum Section Institute for Basic Standards National Bureau of Standards

Dr. Heydemann is recognized for his meritorious service to the Department through his outstanding contributions to measurement standards in the field of pressure and vacuum. Under his direction the Bureau's services have been greatly improved and expanded, with many technical innovations and careful attention to customer needs. This program has provided valuable metrological support to the Nation, to industry, and to several major Government agencies, especially the Department of Defense, Dr. Heydemann has been extremely effective in international collaborative efforts and in rendering expert assistance to numerous laboratories abroad.

Raymond G. Kammer, Jr.

Supervisory Program Analyst Office of the Associate Director for Programs National Bureau of Standards

Mr. Kammer is recognized for outstanding professional skill and tireless dedication leading to many significant improvements to the Bureau's policy, management, and program quality. His training, organizing, and quality control of the Program and Budget Analysts have provided a highly motivated organization for critiquing programs and services. He has upgraded the criteria and process for establishing Bureau program and equipment priorities. He has led a number of critical studies for the Visiting Committee, the Department, and for the Office of Management and Budget. His assistance was critical to developing responses to Congressional inquiries on legislation such as the Energy Policy Act of 1975 and the Energy Conservation and Production Act of 1976.

William H. Kirchhoff

Physicial Science Administrator Institute for Materials Research National Bureau of Standards

Dr. Kirchhoff is recognized for his excellence in the field of microwave spectroscopy and for his outstanding leadership in the area of water pollution measurement methods and standards. Dr. Kirchhoff's expertise has established him as a world leader in spectroscopy. and his efforts in this field helped in the discovery of the molecule sulphur monoxide dimer in 1973. Dr. Kirchhoff's role as the Bureau's Program Manager for Water Pollution Measurement has been instrumental in establishing the National Bureau of Standards as a national resource for measurement methods and standards in meeting the needs of this major national goal.

Theodore W. Lashof

Program Manager, Laboratory Performance Institute for Applied Technology National Bureau of Standards

Dr. Lashof is recognized for his valuable contributions to the evaluation of test methods and the laboratories that apply these methods to test products for conformance to standards. His outstanding ability in using statistical technique and experimental design and data analysis to standardize test methods has earned him a national and international reputation in the laboratory evaluation field. His significant technical leadership was instrumental in resolving a long-standing international problem existing between Canada's National Research Council and the Bureau in which the measurement of diffuse and absolute reflectance of fluorescent papers was involved. His method of linear analysis became the basis of an American Society for Testing and Materials Special Publication. His publications in the field serve as primary works of reference for industry and testing laboratories.

Supervisory Electronic Engineer Institute for Applied Technology National Bureau of Standards Chemist Institute for Materials Research National Bureau of Standards

Mr. Lederer is recognized for his outstanding technical contributions and leadership in increasing reliability in the application of sensory transducers. Mr. Lederer's pioneering work has made a major impact on the most significant problem in transducer application at the present time, the gap between the ability to make accurate measurements in the idealized and carefully controlled conditions of a standards laboratory and the ability to make what appear to be similar measurements under the constraints of real-world measurement environments. His work has found direct application in industry and government and has been widely recognized as contributing significantly to increased performance and reliability of transducers that are being used on an ever increasing scale in many important areas, including power generation, automotive transportation, industrial control, defense, and space.

lence in the field of structural inorganic chemistry and for his invaluable scientific input to the Department and Bureau management in the areas of materials utilization and conservation. He has published over 30 research papers in the areas of x-ray crystallography and optical and vibrational spectroscopy which are frequently referenced by other scientists. His research on complex biological molecules contributed significantly to the understanding of bonding and configurational possibilities and aided biochemists in their approach to such problems. He also has provided critical and expert advice to key Commerce and Bureau officials in the area of national materials policy.

Dr. Reimann is recognized for his excel-

Paul Meissner

Joseph J. Ritter

Electronic Engineer Institute for Computer Sciences and Technology National Bureau of Standards Research Chemist Institute for Materials Research National Bureau of Standards

Mr. Meissner has made outstanding contributions in leading Federal agencies in the use of automated personal identification techniques to control access to confidential data in computer systems and networks. As a pioneer in this new, important technical area, he has assured that Federal agencies will have adequate guidance when and as they need it to comply with the Privacy Act of 1974. The results of this work are improving the effectiveness, efficiency, and economy of the Federal Government's use of computer technology. Mr. Meissner has become widely recognized for his achievements in this area, and he has reflected credit on the Department of Commerce and strengthened the Department's role in the rapidly growing field of computer technology.

Dr. Ritter has distinguished himself through outstanding creative scientific and technical accomplishments in several distinct areas. He is an exceptionally skilled experimental chemist, expert in the preparation and characterization of highly reactive materials, many of which have found use by colleagues at the Bureau and elsewhere for fundamental studies. He has demonstrated a high order of creativity and skill in developing improved apparatus for calibration of gas analyses and applying it to a definitive analysis of experimental parameters and error sources in this measurement problem. His work in laserinduced chemical reactions of materials has led to significant advances in the state of the art of laser isotope enrichment as well as to concepts applicable more broadly to laser-based chemical technology.

Chief, Program for Physics and Dynamics Center for Fire Research Institute for Applied Technology National Bureau of Standards

Dr. Rockett is recognized for his superior leadership of the Program for Physics and Dynamics of the Center for Fire Research. Using his superior technical judgment, Dr. Rockett assembled a group of experts and directed their talents toward solving problems fundamental to unwanted fires. He is guiding his staff in developing a mathematical model of fire behavior which will allow state and local officials to predict the hazards of buildings in their areas and architects to judge the fire safety of buildings they design. He is leading studies of smoldering combustion, the single largest cause of fire deaths in the U.S. This work has discovered sulphur as a promising solution to the problem. He supervised development of an aerosol generator which will serve as a reference device for measuring the effectiveness of test methods for smoke detectors.

Rosalie T. Ruegg

Industry Economist Institute for Applied Technology National Bureau of Standards

Ms. Ruegg is recognized for her significant contributions to energy conservation through her pioneering work in determining the economic feasibility of solar energy systems. The methodology she developed for evaluating various financial incentive policies for encouraging the use of solar energy systems in buildings has brought her national and international acclaim. As a result of her work, Federal, state, and local governments, as well as organizations in the private sector, have, for the first time, a mechanism for selecting the most effective financial incentive policy for promoting the use of solar energy systems in commercial and residential buildings being built or retrofitted.

Stanley P. Wasik

Research Chemist Institute for Materials Research National Bureau of Standards

Dr. Wasik has demonstrated great creativity in his development of highly sophisticated techniques for the gas chromatographic separation and detection of hydrocarbons and other pollutants in our marine environment. The electrolytic stripping cell which he developed has been widely adopted in other laboratories for rapid, accurate water pollutant analysis, and Dr. Wasik has extended its utilization to the study of the processes important in the spread of pollutants in fresh and sea water. He has made key contributions to studies of the uptake of pollutants by fish. Other sampling techniques devised by Dr. Wasik have permitted analyses to be made of carcinogenic hydrocarbon samples which are also potentially applicable to the characterization of marine oil spills.

Arnold Wexler

Assistant Chief for Humidity of the Equation of State Section Institute for Basic Standards National Bureau of Standards

Mr. Wexler is recognized for his past meritorious service to the Department through his outstanding contributions to measurement standards in the field of humidity and moisture. During some 17 years of leadership of this program, Mr. Wexler has become the foremost U.S. expert in this field and achieved international recognition. The measurement techniques and apparatus developed under Mr. Wexler's guidance have been duplicated in the national laboratories of other major industrial countries. This program has furnished valuable metrological support to several major Government agencies (notably National Aeronautics and Space Administration, Agriculture, Defense, and the Weather Service) and to numerous segments of U.S. industry (e.g., paper, textiles, foods, electronics, refrigeration and air-conditioning).

Theodore R. Young

General Physical Scientist Institute for Applied Technology National Bureau of Standards

Mr. Young is recogized for his outstanding achievement in bringing to fruition the Department's National Voluntary Laboratory Accreditation Program. From November 1970 to May 1975, he patiently persevered on this project, working with testing laboratory representatives, laboratory users, and various officials in Commerce in the evolution of a system for measuring the skills and accuracies of testing laboratories in the U.S. Mr. Young had sole responsibility for the drafting of Federal Register Notices, the summation and analyses of hearings, and the continued development of program documentation. The appearance in the March 10, 1977, Federal Register of the first fully-documented request for a laboratory accreditation program for testing thermal insulation materials is his most recent accomplishment.

David Hogben

Mathematical Statistician

Sally T. Peavy

Mathematician Institute for Basic Standards National Bureau of Standards

Dr. Hogben and Mrs. Peavy, in an outstanding creative collaboration, have provided a computing system, OMNITAB II, which has enhanced the productivity of thousands of scientists, administrators, teachers, and students, by making it easy to instruct a computer to manipulate data and perform complex statistical analyses. Recent improvements in OMNITAB increase its usefulness by exploiting new computer technology to make OMNITAB usable interactively from remote terminals. Continuous revision provides the latest developments in statistical methodology for data analysis, especially plotting and checking the validity of analyses. This work represents an exceptionally thoughtful user-oriented approach to the facilitation of computer utilization.

Robert E. Edsinger

Physicist

Leslie A. Guildner

Research Chemist Institute for Basic Standards National Bureau of Standards

Mr. Edsinger and Dr. Guildner are recognized for their development of a gas thermometer of unprecedented accuracy and for the employment of that instrument to discover substantial errors in the understanding of the International Practical Temperature Scale over the range 273 K to 730 K. Mr. Edsinger and Dr. Guildner accomplished their goal of qualitatively improving the science of gas thermometry through diligent and painstaking application of measurement science of the highest order in solving problems of precise manometry, accurate dead-space and thermal expansion corrections, and the elimination of measurement errors owing to sorption of parasitic gases. The International Advisory Committee for Thermometry has acknowledged the very high quality of these results by modifying the Temperature Scale text.

James G. Gross

Chief, Office of Building Standards and Codes Services

James H. Pielert

Program Manager, Building Standards and Codes Development Institute for Applied Technology National Bureau of Standards

Messrs. Gross and Pielert are recognized for their significant contributions in increasing the safety, durability, and livability of mobile homes. For the Department of Housing and Urban Development (HUD), Messrs, Gross and Pielert identified over 60 major mobile home problems such as rain leaks; faulty electrical, mechanical, and plumbing systems; and inadequate construction practices. They provided solutions to over 20 of these problems, some of which were added to the American National Standards Institute standard; others were incorporated into the Federal Mobile Home Standard developed by HUD under the Housing and Community Development Act of 1974. Based on their work, HUD published a national Standard which took effect in 1976.

Supervisory Physicist

Meyer Waxman

Physicist

Harry Davis

Physical Science Technician Institute for Basic Standards National Bureau of Standards

Dr. Klein and Messrs. Waxman and Davis are recognized for the development, building, testing, and successful ocean deployment of a low cost, easy to use sampler using a highly innovative and unusual mechanical design, capable of automatic collection of samples at the enormous pressures encountered at the deep-ocean floor. This sampler has been maintained at the ocean bed temperature and pressure for many months since retrieval and has been used successfully by microbiologists to study the peculiar behavior of deep ocean organisms maintained in their natural environment. The sampler has enabled a small university department to participate with international collaborators in a research area previously prohibitively expensive.

Ellis B. Burton

Meteorologist-In-Charge National Weather Service National Oceanic and Atmospheric Administration Bismarck, North Dakota

Mr. Burton is cited for his extraordinary technical and administrative leadership and public service as Meteorologist-in-Charge of the National Weather Service Forecast Office at Bismarck, North Dakota. His vision, innovation, and direction have provided the citizens of North Dakota with outstanding weather services and especially a high quality severe local and winter storm flood forecasting, warning, and preparedness program.

Robert K. De Lawder

Cartographer National Ocean Survery National Oceanic and Atmospheric Administration

Mr. De Lawder has demonstrated extraordinary skill, technical competence, leadership, and dedication in the field of nautical charting, both domestic and international through his guidance and coordination involved in major programs of metric charting, international charting, and boundary charts. This has resulted in the publication of the United States first national metric chart, the five international charts of the International Series, and the depiction on national charts of the United States Territorial Sea boundary, the Contiguous Zone limit, and the 200-mile Fishery Conservation Zone limit. The programs and products are of great national importance. He has demonstrated great diplomacy and tact in his contacts, both domestic and international, in achieving the goals of the Nation.

Roland A. Finch

Fisheries Management Regional Resource Specialist Office of Associate Administrator for Marine Resources National Oceanic and Atmospheric Administration

Mr. Finch is recognized for his efforts as the leader in the development of the National Fisheries Plan. He made numerous contributions and devoted extraordinary efforts to effectively present the Plan to numerous high-level officials throughout the Nation, led discussion of policy issues which were considered controversial, and brought the work on the Plan to a successful conclusion. By his diplomacy and understanding of the complex issues involved, he was able to gain general acceptance of its concepts by all of the divergent groups involved in the formulation of the Plan. Mr. Finch is recognized as an international authority in the field of nutrition. He led the way in bringing the nutritive benefits of fishery products to wider recognition.

Frank V. Garcia

Chief, Radio Facility Chart Branch National Ocean Survey National Oceanic and Atmospheric Administration

Mr. Garcia is recognized for his outstanding managerial abilities in the production and maintenance of aeronautical charts. He has established himself among his peers within the Federal mapping community as a professional cartographer "par excellence". His contributions as a member of the Inter-Agency Air Cartographic (IACC) Task Group, led to the successful development of government chart specifications for joint military and civilian use. Mr. Garcia has brought credit to the National Ocean Survey and the Department of Commerce through his many activities with other agencies and through his outstanding community development.

Richard Haas

Chief, Electronic Equipment Branch National Weather Service National Oceanic and Atmospheric Administration

Mr. Haas had made unique contributions to the implementation of the National Weather Service automated facsimile system by the design of key components which convert facsimile signals to computer data and vice versa. He has designed and built many other components to this system. This system is fundamental to the present national weather forecast since it distributes computer output products. At the same time over one-half million dollars in cost saving and reduction of manpower requirements have been achieved.

Harry F. Hawkins, Jr.

Assistant Director
National Hurricane Research Laboratory
National Hurricane and Experimental
Meteorology Laboratory
National Oceanic and Atmospheric
Administration
Miami, Florida

Dr. Hawkins is recognized for outstanding scientific contributions as a leader in the design, execution, analysis, and publication of results from research aircraft reconnaissance of natural and experimentally modified hurricanes which have produced a group of scientific publications that collectively constitute the most definitive information available on the structure, physical processes, and energy budgets of individual hurricanes. These publications have made valuable contributions to establishing the scientific credibility of the hurricane modification experiments. In addition, Dr. Hawkins has demonstrated outstanding administrative leadership as Alternate Director, Project STORMFURY.

Steacy D. Hicks

Physical Oceanographer National Ocean Survey National Oceanic and Atmospheric Administration

Through significant accomplishments in the field of oceanography, Mr. Hicks has distinguished himself on a national level and greatly enhanced the scientific reputation of the National Ocean Survey and the Department of Commerce. His unique contributions were essential in defining and solving the complex and technically difficult tidal datum problems in the Gulf of Mexico and resulted in the publication of the document, "Gulf Coast Low Water Datum". Numerous professional papers authored by Mr. Hicks in the areas of tides and sea level have served as the fundamental bases for further research in these areas.

Jean T. Lee

Research Meteorologist Environmental Research Laboratories National Oceanic and Atmospheric Administration Norman, Oklahoma

Mr. Lee is recognized for life-saving contributions to the description of turbulence in and near thunderstorms, interpretation of weather radar data in terms of storm turbulence, and establishment of safety criteria for flight of aircraft near thunderstorms. In addition, he has given generous assistance to other government agencies, commercial airlines, and military services in resolving problems associated with aircraft operations in thunderstorm conditions. He made contributions toward the application of Doppler radar to the spatial definition of turbulence hazards to aircraft.

Barbara McLaughlin

Chief, Procurement, Grant and Loan Management Branch Office of Administration National Oceanic and Atmospheric Administration

Ms. McLaughlin is recognized for exceptional and outstanding leadership in the administration of the Grant and Loan Program. Under Congressional mandate the National Oceanic and Atmospheric Administration (NOAA) is responsible for administering the Coastal Zone Management Act of 1972, the Sea Grant Improvement Act of 1976, the Fishery Conservation and Management Act of 1976, and the Coastal Energy Impact Program. Grants and loans for these programs have increased from \$18 million in 1972 to over \$75 million in 1977 and will exceed \$200 million in 1978. Ms. McLaughlin, as NOAA's Grant and Loan Officer, has developed an effective administrative management program for this important new legislation.

Maxwell M. Rogers

Chief, Nautical Chart Branch National Ocean Survey National Oceanic and Atmospheric Administration

Mr. Rogers is recognized for his valuable contributions over the past five years to the administration and advancement of the nautical chart compiling program of the National Ocean Survey. During this period, which was one of continuing transition and planning for transition from manual to automated cartography, Mr. Rogers was outstanding in assuring maintenance of chart production and in assisting the continuing conversion from manual to automated chart production methods. including the initial automated production of selected charts. His efforts were an indispensible contribution to the orderly and efficient prosecution of the nautical chart program.

Robert B. Rollins

Associate Director, Program Development and Management National Ocean Survey National Oceanic and Atmospheric Administration

Mr. Rollins has taken the lead in ensuring the modernization of the National Ocean Survey in its vital national function of providing aeronautical charts, navigational charts, geodetic network operations, and tidal observations and predictions. His specific studies in the operational aspects of these functions have ensured the survival of the National Ocean Survey's continued great record in service to the American public. Mr. Rollins has figured largely in arrangements for the automated production of our various products and in eliminating duplication of programs.

Howard S. Sears

Fishery Research Biologist National Marine Fisheries Service National Oceanic and Atmospheric Administration Auke Bay, Alaska

Mr. Sears planned and executed a vital phase of the Outer Continental Shelf Energy Research Program in Alaska-a low-altitude aerial survey of biological and geological features of intertidal beaches between Bering Strait and Yakutat, a distance of more than 3,000 miles. He devised a system for recording coastal features from low-flying aircraft and made the observations over a period of two years under extended conditions of poor flying weather. After his plane crashed and sank. he salvaged the data from the wreckage and organized another expedition and completed the project on schedule. Results of his Alaska surveys are compiled in an environmental atlas used in various stages of environmental planning by numerous state and Federal agencies.

Dale Sirmans

Supervisory Electronic Engineer Environmental Research Laboratories National Oceanic and Atmospheric Administration Norman, Oklahoma

Mr. Sirmans has been the principal architect of the National Severe Storms Laboratory's (NSSL) Doppler radar facility and has contributed fundamentally to the art and literature of radar data processing. NSSL's Doppler radar facility, through its provision of a thousand times more velocity measurements than were obtainable before, has provided dramatic new insight to processes of storm development and has provided discovery of tornado precursors and substantial promise for more timely and accurate storm warnings to the public. These capabilities have led, in turn, to establishment at NSSL of a major interagency program to examine implementation of Doppler technology into weather operations.

Thomas J. Sokolowski

Geophysicist National Weather Service National Oceanic and Atmospheric Administration Ewa Beach, Hawaii

Mr. Sokolowski has designed, developed. programmed, and implemented a specialized computer system which automated the Pacific Tsunami Warning Center, thereby reducing by 75 percent the time required for preparation and dissemination of warnings to the public. His contribution has significantly improved the accuracy of the tsunami warnings and watches. In addition, his relationships with other scientists, both nationally and internationally, and with the news media, civil defense organizations, and the public have resulted in the development of greater public confidence in the Tsunami Warning System.

Kendall L. Svendsen

Geophysicist
Environmental Data Service
National Oceanic and Atmospheric
Administration
Boulder, Colorado

Mr. Svendsen is recognized for outstanding service to the U.S. and world scientific communities in the promotion of and assistance to world-wide programs of measurement of the earth's geomagnetic field. He has been the primary unifying force in this area, both working through international scientific organizations and directly with observers and local officials. particularly in developing countries. As a result U.S. and foreign scientists have available for research and applications a much larger and a higher quality bank of data on the temporal and spatial variations of the earth's magnetism which is widely used in navigation, in telecommunications, in surveying, and other commercial and industrial applications as well as for research on the terrestrial environment.

Raymond R. Waldman

Meteorologist-in-Charge National Weather Service National Oceanic and Atmospheric Administration Chicago, Illinois

Mr. Waldman is recognized for outstanding leadership and management as Meteorologist-in-Charge of two major Weather Service Forecast Offices, Milwaukee and Chicago. His remarkable sensitivity to employee needs resulted in high morale and increased productivity at both Weather Service Forecast Offices. He has proven to be a strong technical, administrative. and motivating leader. He has excelled in development of a disaster preparedness program in Illinois by emphasizing statewide tornado safety drills, preparedness programs, and by obtaining a declaration of a Disaster Preparedness Month by the Governor of Illinois. Through his efforts severe local and winter storm and flood forecast and warning programs are better understood and more effective.

Harold M. Woolf

Meteorologist National Environmental Satellite Service National Oceanic and Almospheric Administration

Mr. Woolf is recognized for pioneering work in the development of software for deriving temperature soundings from satellite measurements. His involvement in the data processing for remote sounding for each research and operational satellite has been instrumental in the success of the program. Also, he has taken an active role in the scientific development and has authored or coauthored significant publications in the field. Most recently he has designed and implemented a complex system for processing remote soundings for the Data System Tests, which data are used by numerical weather prediction groups preparing for the First GARP Global Experiment. This system has been accepted for the next generation of operational temperature soundings. A leading expert in this field, he has contributed significantly to the national and international meteorological community.

David W. Holmes

Chief, Sounding Systems Branch

Robert R. Miller

Radar Program Engineer National Weather Service National Oceanic and Atmospheric Administration

Messrs. Holmes and Miller have demonstrated outstanding leadership, technical ability, and performance in managing and implementing the National Weather Service Local Warning Radar Program, resulting in significant advancement in warning capabilities benefiting the entire Nation. Through excellent planning, critical analysis, preparation of design specifications, and expert technical ability, they established a sound plan and procurement for radars which meet new stringent radiation requirements established by the Office of Telecommunication Policy. These systems are highly reliable, meet all operational requirements, and perform without interfering with government and private radio and microwave communications in dense radiation environments. Their exemplary management of the implementation of these systems provided timely installations at the most rapid rate.

Ronald E. Drummond

Official-in-Charge Beckley, West Virginia

Russell L. Durham

Meteorologist Louisville, Kentucky

Philip C. Zinn

Hydrologist Charleston, West Virginia National Weather Service National Oceanic and Atmospheric Administration

Messrs. Drummond, Durham, and Zinn are recognized for their prompt assessment of the imminent and widespread threat to life and property and for their decisive actions in an unusual flood emergency which avoided the loss of many lives in the Appalachian Flood of April 4 and 5, 1977, in southern West Virginia and eastern Kentucky. They provided a continuous flow of bulletins, statements, and advisories to the affected counties and communities. thus helping them to prepare for the flood emergency. As a result of their efforts, although many communities lost power during the heavy rains, the early warnings disseminated by these men enabled preparations to be made to lessen flood damage.

Bradford R. Huther

Deputy Assistant Commissioner for Administration Patent and Trademark Office

Mr. Huther is recognized for outstanding performance of duties which has resulted in significant advances to administrative support processes of the United States Patent and Trademark Office. He has demonstrated creative skill in the development of improved and more efficient methods and procedures as well as managerial ability in implementing these procedures and processes. Savings in patent copy sales alone will approach \$340,000 per year, with 35 fewer employees, in considerably less space, with reduced waste, with greater productivity, and with better quality service to the public.

Myra K. Kurzbard

Supervisory Attorney (Trademark)
Patent and Trademark Office

Mrs. Kurzbard established the Seminar in Trademark Office Practice and Procedure and has been the Director of the program since its inception. Through her leadership and initiative, the program has become widely recognized by professionals, both within and without the Government as an invaluable contribution to improved trademark examination and practice in the Patent and Trademark Office.

L. William Varner, Jr.

Director, Office of Patent Program Control Patent and Trademark Office

Mr. Varner, is recognized for his contributions in establishing a program for ensuring the high quality of granted patent applications, for providing planning and budget control of the budget for the Patent Examining Corps, and for developing and administering ongoing training courses for the Patent Examining Corps. He has contributed significantly to achieving the principal goal of the Patent and Trademark Office, the effective examining of patent applications and the issuance of valid patents within a shortened period of time.

Herbert C. Wamsley

Executive Assistant to the Commissioner Patent and Trademark Office

Mr. Wamsley played a leading role in implementing a series of changes in the Rules of Practice of the Patent and Trademark Office, widely considered to be the most constructive and far-reaching improvements in Office practice in many years. Even without changes in the basic patent laws, many of the desired improvements have now been accomplished through these changes in the Rules of Practice. Mr. Wamsley was influential in initiating this effort and chaired the task force that developed and recommended specific language. The changes will guard against the improvident grant of patents. while not greatly increasing the burden on patent applicants. They benefit the public and reflect much credit on the Department of Commerce.

